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**Letter of Transmittal**

Date 28 July, 1998  
File Number 74167-001  
From Sunila Gupta  
Joseph Savarese

NJDEP  
INDUSTRIAL SITE  
EVALUATION ELEMENT  
CN028  
TRENTON, N.J. 08628  
JUL 29 1998

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To New Jersey Department of Environmental Protection  
BEECRA, P.O. Box 432  
401 East State Street, Trenton, NJ 08625

Attention Mr. Joseph Nowak

Copy to A. William Nosil;  
Edward Hogan, Esq.

Subject Hexcel Facility, Lodi, NJ

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Copies	Date	Description
3	27 July 1998	Hexcel Progress Report

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Remarks



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27 July 1998  
File No. 74167-001

New Jersey Department of Environmental Protection  
Bureau of Environmental Evaluation and Cleanup Responsibility Assessment  
P.O. Box 432  
401 East State Street  
Trenton, NJ 08625

Attention: Joseph J. Nowak  
  
Subject: Hexcel Corporation  
Lodi Borough, Bergen County, New Jersey  
ISRA Case No. 86009

Dear Mr. Nowak:

On behalf of Hexcel Corporation (Hexcel), the following is the progress report of activities carried out during April, May and June 1998. This quarterly report is prepared in accordance with the Industrial Site Recovery Act (ISRA) requirements for the Hexcel facility in Lodi, New Jersey.

The following topics are discussed in this progress report:

**OFFICES**

Boston  
Massachusetts

Cleveland  
Ohio

Denver  
Colorado

Hartford  
Connecticut

Los Angeles  
California

Manchester  
New Hampshire

Portland  
Maine

Rochester  
New York

San Diego  
California

San Francisco  
California

Washington  
District of Columbia

- 1) Groundwater/DNAPL/LNAPL Monitoring
  - a) Quarterly Monitoring
  - b) Monthly Monitoring
- 2) Product Recovery Program
  - a) DNAPL Recovery
  - b) LNAPL Recovery
- 3) Remedial Design Planning
  - a) Monitoring Well Sampling
  - b) Surface Water Sampling
  - c) Additional Investigation
- 4) Groundwater Treatment System
- 5) Waste Disposal Documentation
- 6) Schedule and Cost Estimates

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## **1. Groundwater/DNAPL/LNAPL Monitoring**

This section includes the results of quarterly monitoring performed in April 1998 and monthly monitoring performed in May and June 1998. Quarterly and monthly monitoring are performed in accordance with the NJDEP-approved plan presented in our progress report dated 24 October 1994.

### **1a. Quarterly Monitoring**

Hexcel conducted quarterly groundwater elevation, DNAPL and LNAPL monitoring on 22 April 1998, in accordance with the monitoring plan. Results of the quarterly monitoring are tabulated in Table I. Figures 1 and 2 illustrate shallow and deep groundwater elevation contours, respectively. Contour Map Reporting Forms are included for each of the contour maps. Table II contains a summary of well construction data to accompany the Contour Map Reporting Form for Figure 1. Tables I and II, Figures 1 and 2 and the contour map reporting forms are included as Appendix A.

### **1b. Monthly Monitoring**

In addition to the quarterly monitoring conducted in April, Hexcel conducted monthly DNAPL and LNAPL monitoring on 19 May and 29 June 1998 in accordance with the monitoring plan and modifications approved by the NJDEP in its 12 June 1995 letter. Results for the May and June monthly monitoring are provided in Table III and Table IV respectively, located in Appendix B.

One modification was made to the monthly monitoring plan in the second quarter of 1998. RW7-5 was added to the monthly monitoring program subsequent to the detection of DNAPL on the product interface-probe during the quarterly monitoring event in April.

Hexcel will continue to perform monthly monitoring in accordance with the approved plan. Hexcel will report any modification to the monthly monitoring, by the addition and deletion of wells, in the progress reports.

## **2. Product Recovery Program**

This section includes results for the temporary product recovery program currently being implemented at the site. For the purposes of product collection, quantities less than 0.1 gallon (approximately 1 cup) are considered to be non-recoverable. Based on our experience, if the product interface meter does not signal the presence of product, then it is not possible to pump a significant amount of DNAPL from the well, even when DNAPL is observed on the probe. Therefore, DNAPL recovery is usually attempted only when there is a signal from the product interface meter indicating the presence of product.

## **2a. DNAPL Recovery**

During the second quarter of 1998, DNAPL recovery was performed at monitoring well MW-6. Approximately 0.6 gallons of DNAPL was recovered from MW-6 during the second quarter of 1998. None of the other wells indicated presence of recoverable amounts of DNAPL. DNAPL recovery during this quarter is summarized in Table V, located in Appendix C.

## **2b. LNAPL Recovery**

None of the wells indicated presence of LNAPL during the second quarter of 1998. LNAPL monitoring, conducted at the time of quarterly and monthly monitoring, is summarized in Table VI (Appendix C).

## **3. Remedial Design Planning**

Hexcel is currently developing a remediation plan for the site. As discussed in our 30 June 1998 letter, Hexcel's goal is to present a comprehensive remediation plan in a meeting with the NJDEP in October 1998, to be followed thereafter by submission of a Remedial Action Workplan (RAW). In the meantime, Hexcel is performing remedial alternatives analyses to select an appropriate remedial strategy for the site. The collection of groundwater data and additional soil testing, as described in the following sub-sections, will be utilized to further define the areas for treatment and the design of the remedial approach for the site.

### **3a. Monitoring Well Sampling**

Hexcel has scheduled groundwater sampling at the site for the last week of July. Although NJDEP's 27 May 1998 letter requested only a proposal to collect groundwater with this progress report, Hexcel has decided to proceed with the groundwater sampling for evaluation of current groundwater conditions at the site. This information is essential for the remedial design currently being developed for the site.

As advised in our 30 June 1998 letter to you, Hexcel will be conducting groundwater sampling for a representative set of wells. Figure 3 (Appendix D) shows all the wells that are proposed to be sampled. The inclusion of the wells in the sampling is based on the following factors:

1. Only monitoring wells (MW series) are included. Control wells (CW-series) and recovery wells (RW-series) are not included. The proposed network of MW-series wells is adequate for evaluation of the current on-site groundwater quality. Additionally, the CW-series and RW-series wells were not constructed for monitoring purposes.
2. All shallow-deep monitoring well clusters are included. The data from the clusters will help in comparison of groundwater quality of shallow and deep formations.
3. Monitoring wells that will assist in evaluation of delineation of groundwater contamination are included.

4. One Napp well is proposed to be included in the sampling. The sampling of this well will be contingent upon receiving permission from Napp.

All groundwater samples will be analyzed for Volatile Organics with a library search (VO+10) by EPA Method 624 and Polychlorinated Biphenyls (PCBs) by EPA Method 608. We will provide the analytical results from the groundwater sampling with our next progress report.

### **3b. Surface Water Sampling**

Hexcel proposes to conduct surface water sampling in the Saddle River, in response to the NJDEP's 27 May 1998 letter. The proposed surface water sampling locations are indicated on Figure 3 (Appendix D). One surface water sample each is proposed to be collected at one upgradient, one downgradient, and one potential worst-case in-stream concentration location. All surface water samples will be collected in the stream adjacent to the eastern bank of the Saddle River bank. We will schedule the sampling, subsequent to receiving NJDEP's approval, during a non-flood (low flow) period so that the samples are representative of the impact, if any, from the groundwater conditions at the site.

Sampling will be performed in accordance with the surface water sampling methodologies described in NJDEP Field Sampling Procedures Manual, May 1992. Specifically, we propose to collect surface water samples utilizing laboratory cleaned glass bottles. At the sampling location, the glass bottle will be immersed into the surface water and water will be allowed to run slowly into the bottle until it is full. Surface water samples will be analyzed for VO+10 and PCB parameters by EPA Methods 624 and 608 respectively. For VO analysis, the water sample will be immediately transferred into laboratory prepared and preserved vials. PCB samples will be collected directly into the sample bottles since PCB sample bottles do not require preservation. At each location, samples for VO analysis will be collected first.

We look forward to your approval of the surface water sample locations and sampling methodology. The surface water sampling will be performed upon receiving NJDEP's approval.

### **3c. Additional Investigation**

Hexcel is preparing to conduct further investigation of PCB areas for remedial design planning. The investigation will include collection of surficial soil samples and soil samples above the confining layer for analysis of PCBs. This investigation will facilitate remedial alternative analyses for the site.

## **4. Groundwater Treatment System**

Groundwater, as basement seepage water, continues to be treated on-site and discharged to the Passaic Valley Sewerage Commissioners (PVSC) sewer line. This continues to depress

the groundwater in this area allowing for the recovery of contaminated groundwater in the vicinity of the basement.

#### 5. Waste Disposal Documentation

There were no disposal activities in the second quarter of 1998, therefore, there is no waste disposal documentation to be submitted with this progress report.

#### 6. Schedule and Cost Estimates

Table VII located in Appendix E presents an updated estimate of the schedule of remaining remedial activities. There has been no change to date in the estimate of cleanup costs.

We will continue to submit quarterly progress reports according to the schedule. Please call us if you have any questions regarding the above.

Sincerely yours,  
HALEY & ALDRICH, INC.

  
Sunila Gupta  
Project Engineer

  
Joseph J. Savarese  
Project Manager

Enclosures

c: A. William Nosil  
Edward Hogan, Esq.

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## **Appendix A**

### **Quarterly Monitoring**

**Table I: Quarterly Water Level/Product Thickness Measurements (4/22/98)**

**Table II: Well Construction Data**

**Contour Map Reporting Form for Figure 1**

**Figure 1: Shallow Ground Water Elevation Contours on 4/22/98**

**Contour Map Reporting Form for Figure 2**

**Figure 2: Deep Ground Water Elevation Contours on 4/22/98**

**TABLE I**

QUARTERLY WATER LEVEL/PRODUCT THICKNESS MEASUREMENTS (4/22/98)

HEXCEL FACILITY

LODI, NEW JERSEY

-All measurements in feet -

-All elevations in feet (NGVD)-

Well ID	Type	Depth to Water (4/22/98)	Depth to Product		Product Thickness	Depth to Bottom (4/22/98)	Elevation Top of Casing	Water Elevation (4/22/98)	Well Construction		Comments
			DNAPL	LNAPL					Type	Casing	
RW Series:											
RW1-1	shallow	4.68	--	--	--	14.28	28.24	23.56	flush	s.steel	
RW6-1	shallow	3.24	--	--	--	13.74	28.84	25.60	flush	s.steel	Product on probe (DNAPL)**.
RW6-2	shallow	3.28	--	--	--	14.75	29.34	26.06	flush	s.steel	Sediment on probe.
RW6-3	shallow	4.04	--	--	--	5.44	28.72	24.68	flush	s.steel	
RW7-1	shallow	5.58	--	--	--	16.60	26.25	20.67	flush	s.steel	Product on probe (DNAPL)**.
RW7-2	shallow	5.86	--	--	--	16.84	26.48	20.62	flush	s.steel	Sediment on probe.
RW7-3	shallow	6.14	--	--	--	17.30	26.78	20.64	flush	s.steel	Sediment on probe.
RW7-4	shallow	6.45	--	--	--	19.09	27.11	20.66	flush	s.steel	Product on probe (DNAPL)**.
RW7-5	shallow	7.05	--	--	--	19.39	27.57	20.52	flush	s.steel	Product on probe (DNAPL)**.
RW7-6	shallow	6.49	--	--	--	15.00	26.48	19.99	flush	s.steel	
RW7-7	shallow	6.54	--	--	--	14.86	26.89	20.35	flush	s.steel	
RW7-8	shallow	5.07	--	--	--	14.98	25.90	20.83	flush	s.steel	
RW7-9	shallow	6.48	--	--	--	16.11	26.87	20.39	flush	s.steel	
RW7-10	shallow	6.54	--	--	--	14.20	26.10	19.56	flush	s.steel	
RW15-1	shallow	6.13	--	--	--	14.91	29.95	23.82	flush	s.steel	
RW15-2	shallow						30.15		flush	s.steel	Well not included in quarterly monitoring plan.

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TABLE I

## QUARTERLY WATER LEVEL/PRODUCT THICKNESS MEASUREMENTS (4/22/98)

HEXCEL FACILITY  
LODI, NEW JERSEY

-All measurements in feet -  
-All elevations in feet (NGVD)-

Well ID	Type	Depth to Water (4/22/98)	Depth to Product		Product Thickness	Depth to Bottom (4/22/98)	Elevation Top of Casing	Water Elevation (4/22/98)	Well Construction		Comments
			DNAPL	LNAPL					Type	Casing	
P Series:											
P-1	shallow	6.19	--	--	--	9.40	30.09	23.90	flush	1.5" pvc	Sediment on probe.
P-2	shallow	WA	--	--	--	WA	30.19	WA	flush	1.5" pvc	Well was sealed on March 29, 1996.
PI Series:											
PI-1	deep						26.90		flush	8" s.steel	Well not included in quarterly monitoring plan.
CW Series:											
CW-1	shallow	6.80	--	--	--	11.45	29.77	22.97	flush	s.steel	
CW-2	shallow						29.51		flush	s.steel	Well not included in quarterly monitoring plan.
CW-3	shallow						29.72		flush	s.steel	Recovery well; not included in monitoring plan.
CW-4	shallow	5.83	--	--	--	10.96	28.83	23.00	flush	s.steel	
CW-5	shallow						28.67		flush	s.steel	Recovery well; not included in monitoring plan.
CW-6	shallow						28.93		flush	s.steel	Well not included in quarterly monitoring plan. .
CW-7	shallow	6.77	--	--	--	14.00	26.13	19.36	flush	s.steel	
CW-8	shallow	7.81	--	--	--	13.92	26.77	18.96	flush	s.steel	
CW-9	shallow						26.37		flush	s.steel	Recovery well; not included in monitoring plan.
CW-10	shallow	6.55	--	--	--	10.24	25.91	19.36	flush	s.steel	

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**TABLE I**

QUARTERLY WATER LEVEL/PRODUCT THICKNESS MEASUREMENTS (4/22/98)

HEXCEL FACILITY

LODI, NEW JERSEY

-All measurements in feet -

-All elevations in feet (NGVD)-

Well ID	Type	Depth to Water (4/22/98)	Depth to Product		Product Thickness	Depth to Bottom (4/22/98)	Elevation Top of Casing	Water Elevation (4/22/98)	Well Construction		Comments
			DNAPL	LNAPL					Type	Casing	
CW Series (continued):											
CW-11	shallow						25.74		vaultbox	s.steel	Recovery well; not included in monitoring plan.
CW-12	shallow	6.64	--	--	--	13.98	25.71	19.07	flush	s.steel	Product on probe ( DNAPL)**.
CW-13	shallow						26.05		flush	s.steel	Well not included in quarterly monitoring plan.
CW-14	shallow	7.12	--	--	--	13.89	26.37	19.25	flush	s.steel	
CW-15	shallow						26.31		flush	s.steel	Recovery well; not included in monitoring plan.
CW-16	shallow	6.84	--	--	--	13.93	26.45	19.61	flush	s.steel	Product on probe (DNAPL)**.
CW-17	shallow	6.43	--	--	--	13.95	26.25	19.82	flush	s.steel	
CW-18	shallow						26.61		flush	s.steel	Recovery well; not included in monitoring plan.
CW-19	shallow						26.50		flush	s.steel	Well not included in quarterly monitoring plan.
CW-20	shallow						26.74		flush	s.steel	Well not included in quarterly monitoring plan.
CW-21	shallow						26.77		flush	s.steel	Recovery well; not included in monitoring plan.
CW-22	shallow						26.35		flush	s.steel	Well not included in quarterly monitoring plan.
MW Series:											
MW-1	deep	9.59	--	--	--	23.54	32.42	22.83	stickup	pvc	
MW-2	shallow	7.36	--	--	--	10.26	31.00	23.64	stickup	pvc	
MW-3	deep	9.56	--	--	--	30.78	31.13	21.57	stickup	pvc	
MW-4	shallow	7.74	--	--	--	9.91	32.33	24.59	stickup	pvc	
MW-5	deep	10.43	--	--	--	28.35	32.54	22.11	stickup	pvc	

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**TABLE I****QUARTERLY WATER LEVEL/PRODUCT THICKNESS MEASUREMENTS (4/22/98)**

HEXCEL FACILITY  
LODI, NEW JERSEY

-All measurements in feet -  
-All elevations in feet (NGVD)-

Well ID	Type	Depth to Water (4/22/98)	Depth to Product		Product Thickness	Depth to Bottom (4/22/98)	Elevation Top of Casing	Water Elevation (4/22/98)	Well Construction		Comments
			DNAPL	LNAPL					Type	Casing	
MW Series (continued):											
MW-6	shallow	9.87	18.12	--	0.31	18.43	30.74	20.87	stickup	pvc	Product on probe (DNAPL)**.
MW-7	deep	8.82	--	--	--	32.92	30.68	21.86	stickup	pvc	
MW-8	shallow	11.18	--	--	--	17.36	30.26	19.08	stickup	pvc	Product on probe (DNAPL)**.
MW-9	deep	7.91	--	--	--	29.60	29.83	21.92	stickup	pvc	
MW-10	shallow	11.88	--	--	--	16.77	30.83	18.95	stickup	pvc	
MW-11	deep	9.11	--	--	--	33.54	30.78	21.67	stickup	pvc	
MW-12	shallow	10.18	--	--	--	17.22	31.01	20.83	stickup	pvc	
MW-13	deep	8.92	--	--	--	33.27	31.16	22.24	stickup	pvc	
MW-14	shallow	10.83	--	--	--	15.60	30.70	19.87	stickup	pvc	
MW-15	deep	8.09	--	--	--	25.62	30.77	22.68	stickup	pvc	
MW-16	shallow	6.21	--	--	--	12.65	29.69	23.48	stickup	pvc	
MW-17	shallow	8.65	--	--	--	14.09	31.44	22.79	stickup	pvc	
MW-18	shallow	8.41	--	--	--	11.35	32.23	23.82	stickup	pvc	
MW-19	deep	6.52	--	--	--	26.61	29.08	22.56	stickup	pvc	
MW-20	shallow	4.62	--	--	--	20.07	27.95	23.33	flush	pvc	
MW-21	shallow	8.29	--	--	--	15.14	30.67	22.38	stickup	pvc	
MW-22	shallow	5.24	--	--	--	8.26	28.45	23.21	flush	pvc	
MW-23	shallow	3.90	--	--	--	9.64	27.51	23.61	flush	pvc	Sediment on probe.
MW-24	shallow	2.98	--	--	--	9.67	26.51	23.53	flush	pvc	
MW-25	shallow	6.96	--	--	--	12.75	26.03	19.07	flush	pvc	

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**TABLE I****QUARTERLY WATER LEVEL/PRODUCT THICKNESS MEASUREMENTS (4/22/98)**

HEXCEL FACILITY  
LODI, NEW JERSEY

-All measurements in feet -  
-All elevations in feet (NGVD)-

Well ID	Type	Depth to Water (4/22/98)	Depth to Product		Product Thickness	Depth to Bottom (4/22/98)	Elevation Top of Casing	Water Elevation (4/22/98)	Well Construction		Comments
			DNAPL	LNAPL					Type	Casing	
MW Series (continued):											
MW-26	(a)	6.58	--	--	--	17.94	28.85	22.27	flush	2" pvc	
MW-27	shallow	6.99	--	--	--	12.52	31.43	24.44	stickup	pvc	
MW-28	shallow	9.90	--	--	--	14.82	29.68	19.78	stickup	pvc	
MW-29	shallow	3.62	--	--	--	9.36	27.32	23.70	flush	pvc	Sediment on probe.
MW-30	shallow	4.38	--	--	--	10.48	28.08	23.70	flush	pvc	
MW-31	shallow	4.32	--	--	--	10.63	27.95	23.63	flush	pvc	
MW-32B	shallow	8.07	--	--	--	11.12	31.23	23.16	flush	pvc	
MW-33	shallow	9.43	--	--	--	16.98	31.72	22.29	stickup	pvc	Sediment on probe.
PB Series:											
PB-1	shallow	0.90	--	--	--	4.82	21.78	20.88	stickup	2" g.steel	Sediment on probe.
PB-2	shallow	0.70	--	--	--	5.82	21.25	20.55	stickup	2" g.steel	Product on probe (DNAPL) **; Sediment on probe.
PB-4	shallow	0.80	--	--	--	5.23	21.52	20.72	stickup	2" g.steel	

**NOTES:** All measurements of depths are from the top of casing unless otherwise noted. All wells are 4" diameter unless otherwise noted.

--: Not detected by product interface meter.

N/A : Measurements not available.

(a): Ground water elevation data from MW-26 have been excluded from both shallow and deep aquifer contours; refer to Section 1a of the April 1996 Report for details.

\*: In wells with LNAPL, water levels are corrected using the equation: DTW (corrected) = DTW (measured) - (Product thickness \* specific gravity).

Specific gravity of 0.88 used for water level correction (petroleum lubricating oil).

\*\*: Though the product interface meter did not register presence of product in the well, product was observed on the probe.

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**TABLE II**  
**WELL CONSTRUCTION DATA**  
**HEXCEL FACILITY**  
**LODI, NEW JERSEY**

-All measurements in feet -  
 -All elevations in feet (NGVD)-

Well ID	Type	Ground Elevation	Elevation Top of Casing	Length of Screen	Elevation Top of Screen	Depth to Water	Water Elevation	Well Construction		Installation		Water Table Elv. > Top of Screen Elv.
						(4/22/98)		Type	Casing	Date	By	
RW Series:												
RW1-1	shallow	28.67	28.24	10	23.67	4.68	23.56	flush	s.steel	10/91	Heritage	No
RW6-1	shallow	29.28	28.84	5	20.28	3.24	25.60	flush	s.steel	8/90	Heritage	Yes
RW6-2	shallow	U	29.34	5	U	3.28	26.06	flush	s.steel	8/90	Heritage	U
RW6-3	shallow	29.02	28.72	5	27.52	4.04	24.68	flush	s.steel	8/90	Heritage	No
RW7-1	shallow	26.94	26.25	5	13.94	5.58	20.67	flush	s.steel	8/90	Heritage	Yes
RW7-2	shallow	27.07	26.48	5	14.57	5.86	20.62	flush	s.steel	8/90	Heritage	Yes
RW7-3	shallow	27.17	26.78	5	14.67	6.14	20.64	flush	s.steel	8/90	Heritage	Yes
RW7-4	shallow	27.60	27.11	5	13.60	6.45	20.66	flush	s.steel	8/90	Heritage	Yes
RW7-5	shallow	27.97	27.57	5	12.97	7.05	20.52	flush	s.steel	9/90	Heritage	Yes
RW7-6	shallow	27.10	26.48	5	17.10	6.49	19.99	flush	s.steel	9/90	Heritage	Yes
RW7-7	shallow	27.25	26.89	5	17.25	6.54	20.35	flush	s.steel	9/90	Heritage	Yes
RW7-8	shallow	26.71	25.90	5	16.71	5.07	20.83	flush	s.steel	9/90	Heritage	Yes
RW7-9	shallow	27.18	26.87	5	15.18	6.48	20.39	flush	s.steel	2/91	Heritage	Yes
RW7-10	shallow	26.50	26.10	5	16.50	6.54	19.56	flush	s.steel	2/91	Heritage	Yes
RW15-1	shallow	30.43	29.95	10	25.68	6.13	23.82	flush	s.steel	8/90	Heritage	No
RW15-2	shallow	30.37	30.15	10	26.37			flush	s.steel	8/90	Heritage	NI

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**TABLE II**  
**WELL CONSTRUCTION DATA**  
**HEXCEL FACILITY**  
**LODI, NEW JERSEY**

-All measurements in feet -  
 -All elevations in feet (NGVD)-

Well ID	Type	Ground Elevation	Elevation Top of Casing	Length of Screen	Elevation Top of Screen	Depth to Water	Water Elevation	Well Construction		Installation		Water Table Elv. > Top of Screen Elv.
						(4/22/98)		Type	Casing	Date	By	
P Series:												
P-1	shallow	U	30.09	U	U	7.62	22.47	flush	1.5" pvc	U	U	U
PI Series:												
PI-1	deep	U	26.90	U	U			flush	8" s.steel	10/91	Heritage	^
CW Series:												
CW-1	shallow	30.27	29.77	5	23.27	7.72	22.05	flush	s.steel	9/90	Heritage	No
CW-2	shallow	30.11	29.51	5	23.11			flush	s.steel	9/90	Heritage	NI
CW-3	shallow	U	29.72	5	U			flush	s.steel	9/90	Heritage	NI
CW-4	shallow	29.10	28.83	5	22.60	6.69	22.14	flush	s.steel	7/90	Heritage	No
CW-5	shallow	28.89	28.67	5	22.39			flush	s.steel	7/90	Heritage	NI
CW-6	shallow	29.25	28.93	5	25.25			flush	s.steel	9/90	Heritage	NI
CW-7	shallow	26.70	26.13	5	17.70	8.31	17.82	flush	s.steel	8/90	Heritage	Yes
CW-8	shallow	26.70	26.77	5	17.70	8.70	18.07	flush	s.steel	8/90	Heritage	Yes
CW-9	shallow	26.60	26.37	5	17.60			flush	s.steel	8/90	Heritage	NI
CW-10	shallow	26.50	25.91	5	17.50	7.75	18.16	flush	s.steel	8/90	Heritage	Yes

882320014

**TABLE II**  
**WELL CONSTRUCTION DATA**  
**HEXCEL FACILITY**  
**LODI, NEW JERSEY**

-All measurements in feet -  
 -All elevations in feet (NGVD)-

Well ID	Type	Ground Elevation	Elevation Top of Casing	Length of Screen	Elevation Top of Screen	Depth to Water	Water Elevation	Well Construction		Installation		Water Table Elv. > Top of Screen Elv.
						(4/22/98)		Type	Casing	Date	By	
CW Series (continued):												
CW-11	shallow	26.60	25.74	5	17.60			vaultbox	s.steel	8/90	Heritage	NI
CW-12	shallow	26.51	25.71	5	17.51	6.64	19.07	flush	s.steel	8/90	Heritage	Yes
CW-13	shallow	26.60	26.05	5	17.60			flush	s.steel	8/90	Heritage	NI
CW-14	shallow	26.70	26.37	5	17.70	7.12	19.25	flush	s.steel	8/90	Heritage	Yes
CW-15	shallow	26.90	26.31	5	17.90			flush	s.steel	8/90	Heritage	NI
CW-16	shallow	27.00	26.45	5	18.00	6.84	19.61	flush	s.steel	8/90	Heritage	Yes
CW-17	shallow	27.10	26.25	5	18.10	6.43	19.82	flush	s.steel	8/90	Heritage	Yes
CW-18	shallow	27.20	26.61	5	18.20			flush	s.steel	8/90	Heritage	NI
CW-19	shallow	27.20	26.50	5	18.20			flush	s.steel	8/90	Heritage	NI
CW-20	shallow	27.30	26.74	5	18.30			flush	s.steel	8/90	Heritage	NI
CW-21	shallow	27.40	26.77	5	18.40			flush	s.steel	8/90	Heritage	NI
CW-22	shallow	27.30	26.35	5	18.30			flush	s.steel	8/90	Heritage	NI
MW Series:												
MW-1	deep	29.03	32.42	5	13.88	9.59	22.83	stickup	pvc	7/88	Environ	^
MW-2	shallow	27.90	31.00	5	26.13	7.36	23.64	stickup	pvc	8/88	Environ	No
MW-3	deep	27.84	31.13	5	5.30	9.56	21.57	stickup	pvc	8/88	Environ	^
MW-4	shallow	29.02	32.33	5	27.49	7.74	24.59	stickup	pvc	8/88	Environ	No
MW-5	deep	29.03	32.54	5	9.12	10.43	22.11	stickup	pvc	8/88	Environ	^

882320015

**TABLE II**  
**WELL CONSTRUCTION DATA**  
**HEXCEL FACILITY**  
**LODI, NEW JERSEY**

-All measurements in feet -  
 -All elevations in feet (NGVD)-

Well ID	Type	Ground Elevation	Elevation Top of Casing	Length of Screen	Elevation Top of Screen	Depth to Water	Water Elevation	Well Construction		Installation		Water Table Elv. > Top of Screen Elv.
						(4/22/98)		Type	Casing	Date	By	
MW Series (continued):												
MW-6	shallow	27.14	30.74	10	22.12	9.87	20.87	stickup	pvc	8/88	Environ	No
MW-7	deep	27.18	30.68	5	2.55	8.82	21.86	stickup	pvc	7/88	Environ	^
MW-8	shallow	26.92	30.26	10	22.98	11.18	19.08	stickup	pvc	8/88	Environ	No
MW-9	deep	26.89	29.83	5	5.09	7.91	21.92	stickup	pvc	7/88	Environ	^
MW-10	shallow	27.33	30.83	11	24.81	11.88	18.95	stickup	pvc	8/88	Environ	No
MW-11	deep	27.28	30.78	10	6.86	9.11	21.67	stickup	pvc	7/88	Environ	^
MW-12	shallow	27.62	31.01	10	24.05	10.18	20.83	stickup	pvc	8/88	Environ	No
MW-13	deep	27.63	31.16	5	2.89	8.92	22.24	stickup	pvc	7/88	Environ	^
MW-14	shallow	27.12	30.70	9	24.18	10.83	19.87	stickup	pvc	8/88	Environ	No
MW-15	deep	27.17	30.77	5	10.13	8.09	22.68	stickup	pvc	7/88	Environ	^
MW-16	shallow	26.71	29.69	5	22.14	6.21	23.48	stickup	pvc	8/88	Environ	Yes
MW-17	shallow	29.10	31.44	8	25.10	8.65	22.79	stickup	pvc	1/89	Environ	No
MW-18	shallow	29.04	32.23	5	25.97	8.41	23.82	stickup	pvc	8/88	Environ	No
MW-19	deep	27.30	29.08	5	7.30	6.52	22.56	stickup	pvc	1/89	Environ	^
MW-20	shallow	28.50	27.95	5	13.50	4.62	23.33	flush	pvc	11/90	Heritage	Yes
MW-21	shallow	28.80	30.67	10	25.80	8.29	22.38	stickup	pvc	9/90	Heritage	No
MW-22	shallow	28.73	28.45	5	25.73	5.24	23.21	flush	pvc	12/90	Heritage	No
MW-23	shallow	27.83	27.51	5	22.83	3.90	23.61	flush	pvc	11/90	Heritage	Yes
MW-24	shallow	26.93	26.51	5	21.93	2.98	23.53	flush	pvc	11/90	Heritage	Yes
MW-25	shallow	26.47	26.03	10	23.47	6.96	19.07	flush	pvc	9/90	Heritage	No

882320016



**TABLE II**

WELL CONSTRUCTION DATA  
 HEXCEL FACILITY  
 LODI, NEW JERSEY

-All measurements in feet -  
 -All elevations in feet (NGVD)-

Well ID	Type	Ground Elevation	Elevation Top of Casing	Length of Screen	Elevation Top of Screen	Depth to Water	Water Elevation	Well Construction		Installation		Water Table Elv. > Top of Screen Elv.
						(4/22/98)		Type	Casing	Date	By	
MW Series (continued):												
MW-26	(a)	29.26	28.85	2	12.26	6.58	22.27	flush	2" pvc	12/90	Heritage	(b)
MW-27	shallow	29.10	31.43	5	24.10	6.99	24.44	stickup	pvc	9/90	Heritage	Yes
MW-28	shallow	27.50	29.68	10	24.50	9.90	19.78	stickup	pvc	9/90	Heritage	No
MW-29	shallow	27.50	27.32	5	22.50	3.62	23.70	flush	pvc	2/91	Heritage	Yes
MW-30	shallow	28.25	28.08	5	22.25	4.38	23.70	flush	pvc	2/91	Heritage	Yes
MW-31	shallow	28.33	27.95	5	22.33	4.32	23.63	flush	pvc	2/91	Heritage	Yes
MW-32B	shallow	29.00	31.23	6	26.13	8.07	23.16	stickup	pvc	11/97	H&A	No
MW-33	shallow	U	31.72	10	U	9.43	22.29	stickup	pvc	4/92	Heritage	U
PB Series:												
PB-1	shallow	17.46	21.78	1	16.46	0.90	20.88	stickup	2" g.steel	6/95	GEO	Yes
PB-2	shallow	17.50	21.25	1	16.70	0.70	20.55	stickup	2" g.steel	6/95	GEO	Yes
PB-4	shallow	17.52	21.52	1	16.72	0.80	20.72	stickup	2" g.steel	6/95	GEO	Yes

NOTES: Refer to "Table 2: Summary of Well Construction Data " provided in Appendix B of Progress Report dated July 31, 1995 for the list of sources used for compiling this table.

All measurements of depths are from the top of casing unless otherwise noted.

N/A: Well was inaccessible on the day of quarterly monitoring.

NI: Well not included in the quarterly monitoring.

U: Unknown.

\*: All wells 4" diameter unless otherwise noted.

^: Well is screened in the confined aquifer, therefore, the question is not applicable.

(a): Ground water elevation data from MW-26 have been excluded from both shallow and deep aquifer contours; refer to Section 1a of the April 1996 Report for details.

882320017

## Contour Map Reporting Form

Site Name: Hexcel Facility, Lodi, NJ  
File No.: 74167-004

Figure No.: 1  
Water levels taken on 4/22/98  
Page 1 of 2

1. Did any surveyed well casing elevations change from the previous sampling event? ☐ Yes  
If yes, attach new "Well Certification -Form B" and identify the reason for the elevation change (damage to casing, installation of recovery system in monitoring well, etc.) ☒ No

2. Are there any monitor wells in unconfined aquifers in which the water table elevation is higher than the top of the well screen? If yes, identify these wells. ☒ Yes  
☐ No

*Monitor wells for which the water table elevations are higher than the top of the well screen are identified in Table II: Well Construction Data provided in Appendix A.*

3. Are there any monitor wells present at the site but omitted from the contour map? ☒ Yes  
Unless the omission of the well(s) has been previously approved by the Department, justify the omissions. ☐ No

*The quarterly ground water elevation monitoring plan was approved by NJDEP in its June 12, 1995 letter. For information on additional omissions, please refer to Figure 1: Shallow Groundwater Elevation Contours on 4/22/98 and Table I: Quarterly Water Level/Product Thickness Measurements (4/22/98) in Appendix A.*

4. Are there any monitor wells containing separate phase product during this measuring event? ☒ Yes  
☐ No

*Only MW-6 indicated presence of measurable product (DNAPL) with the product-interface probe. For some other wells, although the product-interface probe did not register presence of product, visual observation of the probe indicated presence of product (DNAPL).*

Were any of the monitor wells with separate phase product included in the ground water contour map? ☒ Yes  
☐ No  
If yes, show the formula used to correct the water table elevation.

*The separate phase product detected in MW-6 was DNAPL, therefore, no correction is required for the water table elevation.*

5. Has the ground water flow direction changed more than 45 degrees from the previous ground water contour map? ☐ Yes  
If yes, discuss the reasons for the change. ☒ No

I:\94039\Quarterl\contours.doc

882320018

## Contour Map Reporting Form

**Site Name:** Hexcel Facility, Lodi, NJ  
**Project No.:** 94039

**Figure No.:** 1  
**Water levels taken on** 4/22/98  
**Page 2 of 2**

6. Has ground water mounding and/or depressions been identified in the ground water contour map? ☒ Yes ☐ No  
Unless the ground water mounds and/or depressions are caused by the ground water remediation system, discuss the reasons for this occurrence.

*It is not known why mounding occurs in the vicinity of building 2.*

7. Are all the wells used in the contour map screened in the same water-bearing zone? ☒ Yes ☐ No  
If no, justify inclusion of those wells.

8. Were the ground water contours  
☒ computer generated, ☐ computer aided, or ☐ hand-drawn?  
If computer aided or generated, identify the interpolation method(s) used.

*Kriging Routine*

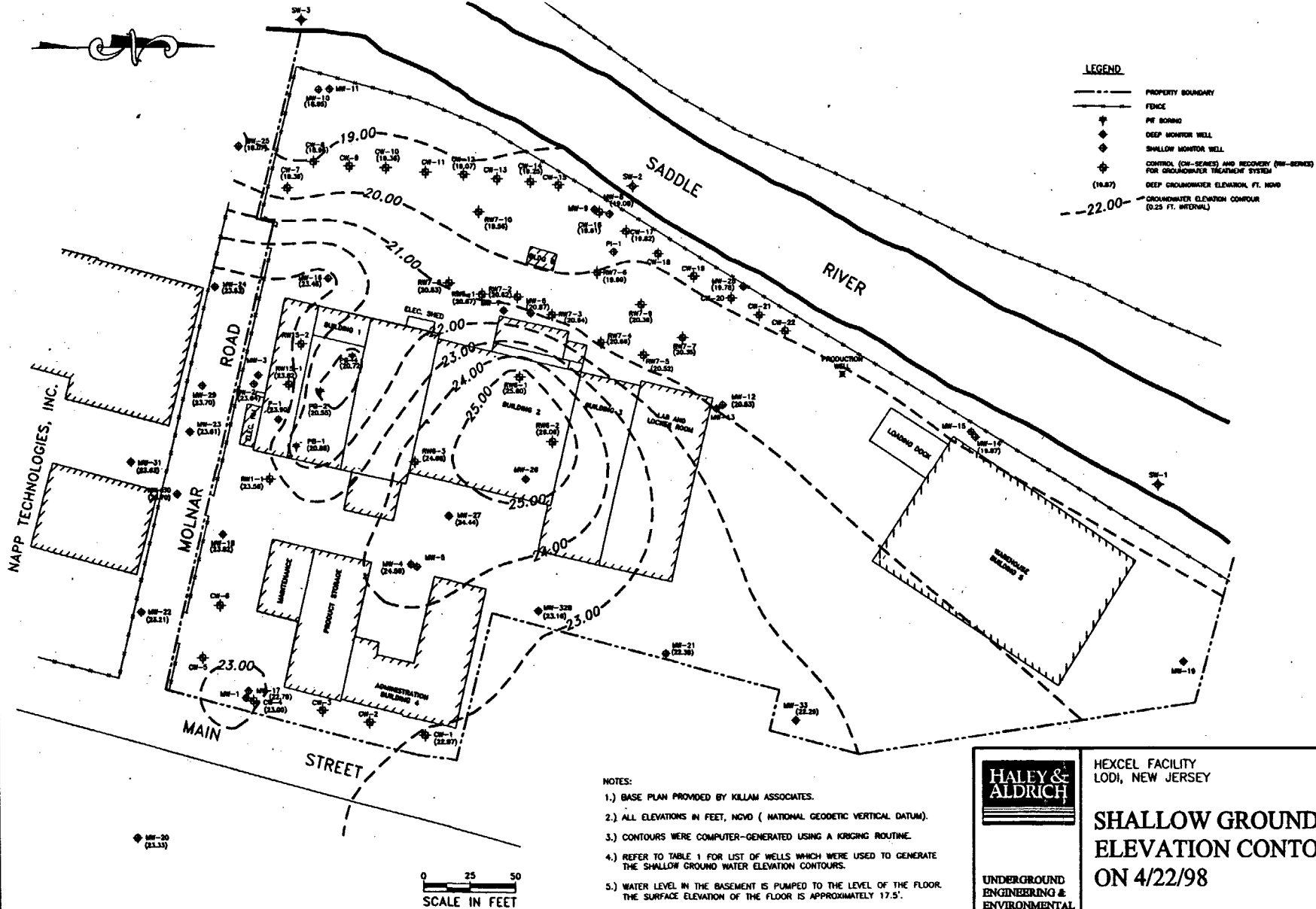


FIGURE 1

## Contour Map Reporting Form

Site Name: Hexcel Facility, Lodi, NJ  
File No.: 74167-004

Figure No.: 2  
Water levels taken on 4/22/98  
Page 1 of 1

1. Did any surveyed well casing elevations change from the previous sampling event? ☐ Yes  
If yes, attach new "Well Certification -Form B" and identify the reason for the elevation change (damage to casing, installation of recovery system in monitoring well, etc.) ☒ No

2. Are there any monitor wells in unconfined aquifers in which the water table elevation is higher than the top of the well screen? If yes, identify these wells. ☐ Yes  
☒ No

*Not applicable because confined aquifer.*

3. Are there any monitor wells present at the site but omitted from the contour map? ☐ Yes  
Unless the omission of the well(s) has been previously approved by the Department, justify the omissions. ☒ No

4. Are there any monitor wells containing separate phase product during this measuring event? ☐ Yes  
☒ No

Were any of the monitor wells with separate phase product included in the ground water contour map? ☐ Yes  
☒ No

If yes, show the formula used to correct the water table elevation.

5. Has the ground water flow direction changed more than 45 degrees from the previous ground water contour map? ☐ Yes  
☒ No

If yes, discuss the reasons for the change.

6. Has ground water mounding and/or depressions been identified in the ground water contour map? ☐ Yes  
☒ No

Unless the ground water mounds and/or depressions are caused by the ground water remediation system, discuss the reasons for this occurrence.

7. Are all the wells used in the contour map screened in the same water-bearing zone? ☒ Yes  
If no, justify inclusion of those wells. ☐ No

8. Were the ground water contours  
☒ computer generated, ☐ computer aided, or ☐ hand-drawn?  
If computer aided or generated, identify the interpolation method(s) used.

*Kriging Routine*

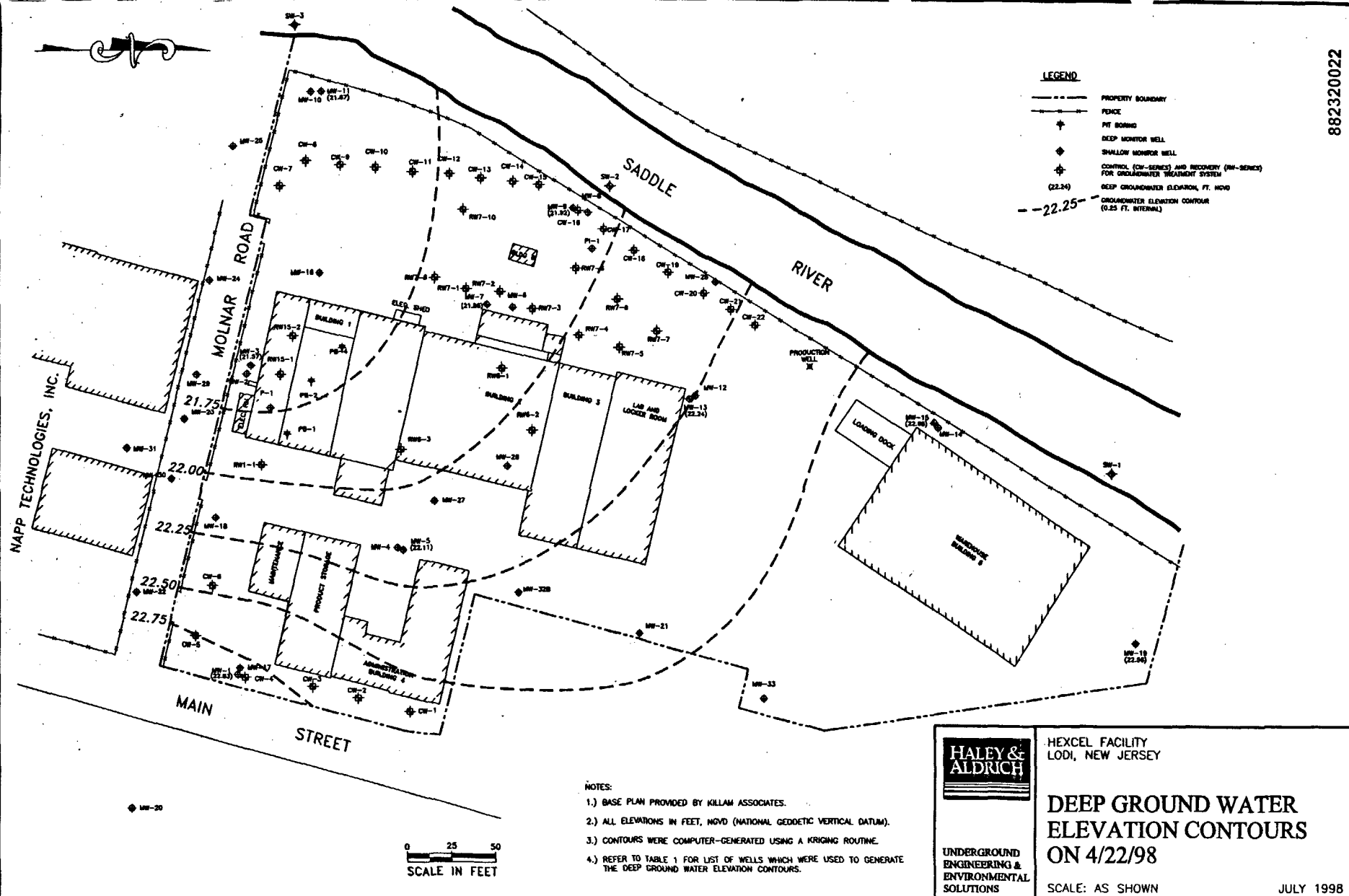


FIGURE 2

## **Appendix B**

### **Monthly Monitoring**

**Table III: Monthly Water Level/Product Thickness Measurements for February 1998**

**Table IV: Monthly Water Level/Product Thickness Measurements for March 1998**

**TABLE III**  
**MONTHLY WATER LEVEL/PRODUCT THICKNESS MEASUREMENTS FOR MAY 1998**  
**HEXCEL FACILITY**  
**LODI, NEW JERSEY**

-All measurements in feet -  
 -All elevations in feet (NGVD)-

MEASUREMENTS COLLECTED : 5/19/98

Well ID	Type	Depth to Water	Depth to Product		Product Thickness	Depth to Bottom	Elevation Top of Casing	Water Elevation	Comments
			DNAPL	LNAPL					
CW-7	shallow	6.61	--	--	--	14.00	26.13	19.52	
CW-12	shallow	6.61	--	--	--	13.97	25.71	19.10	Product on probe (DNAPL)**
CW-16	shallow	7.02	--	--	--	13.92	26.45	19.43	Product on probe (DNAPL)**
MW-6	shallow	9.76	17.95	--	0.36	18.31	30.74	20.98	Product on probe (DNAPL)**
MW-8	shallow	11.25	--	--	--	17.36	30.26	19.01	Product on probe (DNAPL)**
RW6-1	shallow	2.89	--	--	--	13.74	28.84	25.95	Product on probe (DNAPL)**
RW7-1	shallow	5.54	--	--	--	16.57	26.25	20.71	Product on probe (DNAPL)**
RW7-4	shallow	6.34	--	--	--	19.08	27.11	20.77	Product on probe (DNAPL)**
RW7-5	shallow	Well was inadvertently missed during the monitoring event.							
PB-1	shallow	2.10	--	--	--	NM	21.78	NM	Sediment on probe
PB-2	shallow	1.03	--	--	--	5.82	21.25	20.22	Product on probe (DNAPL)**

**NOTES:**

All measurements of depths are from the top of casing unless otherwise noted.

Many of the wells have accumulated sediment which results in slight fluctuations in the measurements of depth to bottom.

--: Not detected by product interface meter.

\*: In wells with LNAPL, water levels are corrected using the equation: DTW (corrected) = DTW (measured) - (Product thickness \* specific gravity).

Specific gravity of 0.88 used for water level correction (petroleum lubricating oil).

\*\* : Though the product-interface meter did not register presence of product in the well, product was observed on the probe.

NM: Measurements could not be made due to sediment in the well.

882320024

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I:\94039\monthly\Month98 (May98)  
6/30/98



**TABLE IV**  
**MONTHLY WATER LEVEL/PRODUCT THICKNESS MEASUREMENTS FOR JUNE 1998**  
**HEXCEL FACILITY**  
**LODI, NEW JERSEY**

-All measurements in feet -  
 -All elevations in feet (NGVD)-

MEASUREMENTS COLLECTED : 6/30/98

Well ID	Type	Depth to Water	Depth to Product		Product Thickness	Depth to Bottom	Elevation Top of Casing	Water Elevation	Comments
			DNAPL	LNAPL					
CW-7	shallow	6.94	--	--	--	14.01	26.13	19.19	
CW-12	shallow	6.83	--	--	--	13.97	25.71	18.88	Product on probe (DNAPL)**
CW-16	shallow	7.09	--	--	--	14.03	26.45	19.36	Product on probe (DNAPL)**
MW-6	shallow	10.04	18.16	--	0.20	18.36	30.74	20.70	Product on probe (DNAPL)**
MW-8	shallow	11.35	--	--	--	17.36	30.26	18.91	Product on probe (DNAPL)**
RW6-1	shallow	2.81	--	--	--	13.94	28.84	26.03	Product on probe (DNAPL)**
RW7-1	shallow	5.49	--	--	--	16.61	26.25	20.76	Product on probe (DNAPL)**
RW7-4	shallow	6.61	--	--	--	19.08	27.11	20.50	Product on probe (DNAPL)**
RW7-5	shallow	7.19	--	--	--	19.39	27.57	20.38	Product on probe (DNAPL)**
PB-1	shallow	0.95	--	--	--	5.12	21.78	20.83	Sediment on probe
PB-2	shallow	0.80	--	--	--	5.81	21.25	20.45	Product on probe (DNAPL)**

**NOTES:**

All measurements of depths are from the top of casing unless otherwise noted.

Many of the wells have accumulated sediment which results in slight fluctuations in the measurements of depth to bottom.

--: Not detected by product interface meter.

\*: In wells with LNAPL, water levels are corrected using the equation: DTW (corrected) = DTW (measured) - (Product thickness \* specific gravity).

Specific gravity of 0.88 used for water level correction (petroleum lubricating oil).

\*\* : Though the product-interface meter did not register presence of product in the well, product was observed on the probe.

882320025

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## **Appendix C**

### **Product Recovery**

**Table V: Product Collection (DNAPL) in First Quarter of 1998**

**Table VI: Product Collection (LNAPL) in First Quarter of 1998**

**TABLE V**  
**PRODUCT COLLECTION (DNAPL) IN FIRST QUARTER OF 1998**  
**HEXCEL FACILITY**  
**LODI, NEW JERSEY**

*All Quantities are Expressed in Gallons Rounded to the Nearest 0.1*

DATE	MW-6 (DNAPL)	MW-8 (DNAPL)	MW-26 (DNAPL)	RW6-1 (DNAPL)	RW7-1 (DNAPL)	RW7-4 (DNAPL)	RW7-5 (DNAPL)	CW-12 (DNAPL)	CW-16 (DNAPL)	PB-2 (DNAPL)	TOTAL VOLUME RECOVERED
4/3/98	--	*	*	*	*	*	*	*	*	*	↓
4/9/98	0.1	*	*	*	*	*	*	*	*	*	
4/17/98	--	*	*	*	*	*	*	*	*	*	
4/22/98 (Quarterly)	0.1	--	--	--	--	--	--	--	--	--	
4/30/98	--	*	*	*	*	*	*	*	*	*	
5/5/98	--	*	*	*	*	*	*	*	*	*	
5/12/98	--	*	*	*	*	*	*	*	*	*	
5/19/98 (Monthly)	0.2	--	*	--	--	--	*	--	--	--	
5/27/98	--	*	*	*	*	*	*	*	*	*	
6/5/98	0.2	*	*	*	*	*	*	*	*	*	
6/10/98	--	*	*	*	*	*	*	*	*	*	
6/18/98	--	*	*	*	*	*	*	*	*	*	
6/30/98 (Monthly)	--	--	*	--	--	--	--	--	--	--	
TOTAL VOLUME RECOVERED, 2nd QUARTER, 1998	0.6	--	--	--	--	--	--	--	--	--	0.6
TOTAL VOLUME RECOVERED, 1st QUARTER 1998	0.7	--	--	--	--	--	--	--	--	--	0.7
TOTAL VOLUME RECOVERED, 10/94 - 12/97	18.7	1.0	0.4	0.1	0.3	--	--	0.7	0.7	4.6	27.3
TOTAL VOLUME RECOVERED (TOTAL SINCE 10/94)	20.0	1.0	0.4	0.1	0.3	--	--	0.7	0.7	4.6	28.6

**Notes:** For product recovery purposes, quantities greater than 0.1 gallons (approx. 1 cup) are considered to be "measurable". It is not practicable to separate product from mixture of water and product when quantity is less than 1 cup.

\*: Well not included in the weekly product recovery program.

--: i) Well was monitored and did not indicate recoverable product or ii) no measurable amount of product was recovered either by bailing or pumping.

882320027

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**TABLE VI**  
**PRODUCT COLLECTION (LNAPL) IN FIRST QUARTER OF 1998**  
**HEXCEL FACILITY**  
**LODI, NEW JERSEY**

*All Quantities are Expressed in Gallons Rounded to the Nearest 0.1*

DATE	MW-6 (LNAPL)	MW-8 (LNAPL)	MW-23 (LNAPL)	RW1-1 (LNAPL)	RW 6-1 (LNAPL)	RW7-4 (LNAPL)	RW7-5 (LNAPL)	CW-7 (LNAPL)	CW-12 (LNAPL)	CW-16 (LNAPL)	MW-17 (LNAPL)	RW 15-1 (LNAPL)	TOTAL VOLUME RECOVERED
4/22/98 (Quarterly)	--	--	--	--	--	--	--	--	--	--	--	--	↓
5/19/98 (Monthly)	--	--	*	*	--	--	*	--	--	--	*	*	
6/30/98 (Monthly)	--	--	*	*	--	--	--	--	--	--	*	*	
TOTAL VOLUME RECOVERED, 2nd QUARTER, 1998	--	--	--	--	--	--	--	--	--	--	--	--	0.0
TOTAL VOLUME RECOVERED, 1st QUARTER 1998	--	--	--	--	--	--	--	--	--	--	--	--	0.0
TOTAL VOLUME RECOVERED, 10/94 - 12/97	6.9	--	--	--	--	--	--	2.6	--	--	--	--	9.5
TOTAL VOLUME RECOVERED (TOTAL SINCE 10/94)	6.9	--	--	--	--	--	--	2.6	--	--	--	--	9.5

**Notes:** For product recovery purposes, quantities greater than 0.1 gallons (approx. 1 cup) are considered to be "measurable". It is not practicable to separate product from mixture of water and product when quantity is less than 1 cup.

\* Well not included in the weekly product recovery.

-- i) Monitoring did not indicate recoverable product or ii) no measurable amount of LNAPL was recovered in the absorbent pad.

882320028

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I:\94039\prodcol\Prodcol2 (Second QL'98 )  
6/30/98

## **Appendix D**

### **Figure 3: Groundwater Sampling and Proposed Surface Water Sampling Locations**

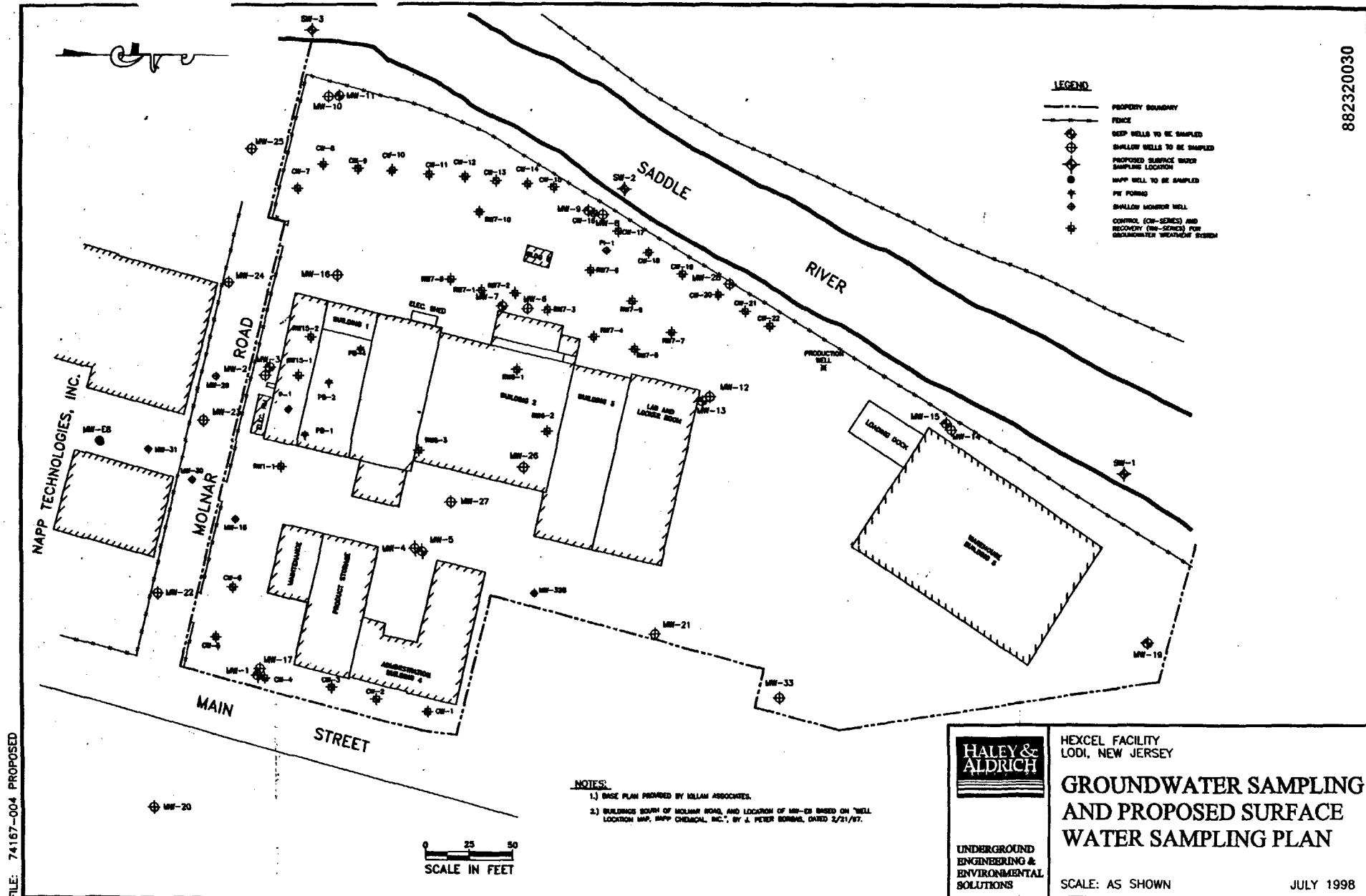


FIGURE 3

## **Appendix E**

### **Schedule Estimates**

**Table VII: Estimated Schedule of Remaining Remedial Activities**

**TABLE VII**  
**ESTIMATED SCHEDULE OF REMAINING REMEDIAL ACTIVITIES**  
**HEXCEL FACILITY**  
**LODI, NEW JERSEY**

TASK DESCRIPTION	1998											
	1	2	3	4	5	6	7	8	9	10	11	12
<b>GROUNDWATER REMEDIATION</b>												
DNAPL/LNAPL recovery (temporary)												
Recover water from basement of Bldg. 1												
Specs for demolition & select contractor												
Demolish bldgs & dispose debris & waste												
Collect, analyze & evaluate groundwater samples												
Collect, analyze & evaluate surface water samples**												
Reevaluate groundwater remedial plans												
Implement remedial plan												
<b>CLEANOUT OF SEWER LINE</b>												
Cleanout/abandonment of sewer line *												
Collect samples (and lab. analysis) *												
Disposal of sludge/debris *												
<b>SOIL REMEDIATION</b>												
Reevaluate soil data and remedial plans												
<b>SEDIMENT SAMPLING</b>												
Reevaluate sediment results												
Trace source of outfall *												
<b>REPORTING</b>												
Meet with NJDEP to propose remedial plan												
Prepare comprehensive remedial plan												
NJDEP review of remedial plan												
Prepare quarterly progress reports												
Prepare final report *												
NJDEP review and site inspection *												
Case closure *												

\* Timing to be estimated within comprehensive remedial plan.

\*\* To be initiated upon NJDEP response to proposal in July progress report.



TABLE VII

ESTIMATED SCHEDULE OF REMAINING REMEDIAL ACTIVITIES  
 HEXCEL FACILITY  
 LODI, NEW JERSEY

Page 2 of 2

TASK DESCRIPTION	1999											
	1	2	3	4	5	6	7	8	9	10	11	12
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Trace source of outfall *												
<b>REPORTING</b>												
Meet with NJDEP to propose remedial plan												
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Prepare quarterly progress reports												
Prepare final report *												
NJDEP review and site inspection *												
Case closure *												

\* Timing to be estimated within comprehensive remedial plan.

\*\* To be initiated upon NJDEP response to proposal in July progress report.

Haley & Aldrich, Inc.  
150 Mineral Spring Drive  
Dover, NJ 07801-1635  
Tel: 973.361.3600  
Fax: 973.361.3800  
E-mail: NEW@HaleyAldrich.com



30 June 1998  
File No. 94039T1

New Jersey Department of Environmental Protection  
401 East State Street, CN-028  
Trenton, NJ 08625

Attention: Joseph J. Nowak

Subject: Response to the NJDEP Letter of 27 May 1998 and Request for Meeting  
Hexcel Corporation Facility, Lodi Borough, Bergen County  
ISRA Case No. 86009

NJDEP  
INDUSTRIAL SITE  
EVALUATION ELEMENT  
TRENTON, N.J. 08625  
JUL 01 1998

Dear Mr. Nowak:

On behalf of Hexcel Corporation (Hexcel), this letter is a response to the New Jersey Department of Environmental Protection (NJDEP) letter of 27 May 1998. Hexcel's overall response is that they are currently in the process of developing a plan for comprehensive and fast-track remediation of the site. As we have discussed with you by phone, Hexcel has reached a point in its negotiations with other parties in the area that it has determined it will move ahead expeditiously with developing a remediation plan of the Hexcel property alone, independent of other parties' issues. There still is the possibility that, in the future, there will be a regional approach to remediation or redevelopment of the area that will incorporate the Hexcel property. However, Hexcel will proceed with its own remediation without waiting for details of these possibilities. Hexcel's goal for its comprehensive plan is for the concept to be presented to the NJDEP in a meeting, to be followed thereafter by a document. The follow-up document can then reflect the issues that develop from discussions with the NJDEP.

Hexcel hereby requests a meeting with the NJDEP in October or as soon thereafter as possible. At this meeting, Hexcel will present its plans for remediation of the site.

The remainder of this letter is presented in the format of item by item responses to the NJDEP's letter.

#### I. Soil

1. Hexcel will include remediation of soil in the comprehensive plan discussed above.

#### II. Groundwater

1. As discussed above, a comprehensive plan for the site is being developed. Primary in the plan's scope will be the issue of how groundwater is to be remediated.
2. Hexcel will develop its remediation plan with NJDEP's requirements in mind as outlined in this item.
3. No response needed.

#### OFFICES

Boston  
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Cleveland  
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Colorado

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California

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New Hampshire

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Maine

Rochester  
New York

San Diego  
California

San Francisco  
California

Washington  
District of Columbia

4. Hexcel will collect samples from the Saddle River. The sample plan will be included in Hexcel's July progress report.
5. The data indicate the silt layer extends beneath Building 2. Hexcel has reviewed the contour map of the silt layer's upper surface (submitted in February 1991) and has taken a closer look at the silt layer in the area of Building 2. Based on the known subsurface information, the top of the silt layer in the general area of monitoring wells MW-26, RW6-2 and RW6-1 exists between the elevations of 14 ft and 10 ft and extends down to an elevation between 7 ft and 4 ft (NGVD 1929). As shown on the cross-section A-A' (Figures 1 and 2), a concrete subsurface basin is believed to be located beneath Building 2. This basin has been observed in construction drawings and aerial photographs of the site. According to site personnel, the basin was backfilled prior to the construction of Building 2. Based on the boring logs from MW-26 and RW6-2, the floor of the basin is at an elevation of approximately 14.5 ft. It appears that the basin has been constructed into the silt layer with a few feet of construction fill existing underneath the basin, but that several feet of the silt material extend beneath the construction fill.

The presence of DNAPL under Building 2 is sufficiently monitored by monitoring wells MW-26, RW6-1 and RW6-2. According to well construction details and field measurements, monitoring well MW-26 is screened directly below the basin's floor and in the construction fill overlying the silt. Monitoring wells RW6-1 and RW6-2 are screened on top of the basin's floor. Therefore, MW-26 is appropriately constructed to monitor for the presence of DNAPL on the silt under the basin's floor. Conversely, RW6-1 and RW6-2 are appropriately constructed to monitor for DNAPL on top of the basin's floor. DNAPL has not been observed at measurable quantities at MW-26 since 31 August 1995, since 10 April 1995 at RW6-1 and at least since October 1994 in RW6-2. Therefore, it appears that DNAPL is not present in significant quantities under Building 2.

The depression in the silt layer centered on monitoring wells RW7-4 and RW7-5 does not appear to extend toward MW-26. Based on the current information, the depression on top of the silt layer centered on RW7-4 and RW7-5 is the lowest point of the silt in this area. In addition, DNAPL has not been observed at measurable quantities at RW7-5 since 10 October 1991 and since 10 May 1994 in RW7-4. Nevertheless, the location of DNAPL is an important consideration and will be a major factor in the design of the remediation plan.

6. Hexcel will consider Napp Technologies, Inc. (Napp) groundwater sampling data and well locations as well as historical groundwater data from Hexcel's wells in its evaluation and proposal of further groundwater sampling (see Item 13 for further reference).
7. No response needed.
8. Hexcel has surveyed the Army Corps of Engineers monitoring well MW08. The results and a cross section were included in Hexcel's 28 January 1998 progress report.

9. We have rechecked the measurement that led to concern about sediment in MW-8 and the measurement was incorrect. The measurement of 10.74 ft (from top of casing) in January 1997 was not due to the presence of sediment, but due to an absorbent pad floating on and protruding above the water. An absorbent pad, installed in monitoring well MW-8 to collect fugitive DNAPL oil droplets stirred up during DNAPL recovery activities, was not removed from the well prior to the 14 January 1997 monitoring of MW-8. The absorbent pad, due to its size, prohibited the water level indicator probe from passing it and contacting the water surface. Since the probe did not advance any further than 10.74 ft, field personnel erroneously concluded the well was filled with sediment. Following the 14 January 1997 monitoring event, the absorbent pad was removed from MW-8 since recoverable amounts of DNAPL have not been observed in this well since 3 November 1995. Since MW-8 is not filling with sediment, this well can still be utilized to monitor for DNAPL adjacent to the Saddle River and does not need to be redeveloped.
10. Hexcel will continue its product monitoring and recovery program.
11. No response needed.
12. Hexcel notes NJDEP comments concerning the use of bailers and will specify if a bailer is used for DNAPL measurement or recovery in the future.
13. Hexcel will collect groundwater samples from a representative set of monitoring wells to evaluate current site groundwater conditions. The sample plan will be included in Hexcel's July progress report.
14. No response needed.

### **III. Stream Sediments**

1. Hexcel will prepare a proposal to trace the source of the storm sewer outfall that is approximately 600 to 650 feet downstream of the Hexcel site. The proposal will be included in Hexcel's comprehensive plan.
2. Hexcel will review the existing and new (see Item 1) data as well as Napp's ecological evaluation to determine whether additional investigation is needed.

### **IV. General Requirements**

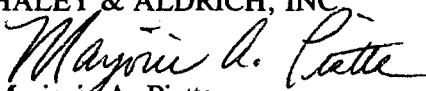
1. No response needed.
2. A revised remedial action schedule is enclosed as Table 1.
3. This letter is provided in response to the requirement to address the items of the NJDEP 27 May 1998 letter within 30 days of receipt of the letter. Plans for groundwater and surface water sampling will be included in the July progress report. A comprehensive plan for remediation of the Hexcel site is being developed and will be presented to the

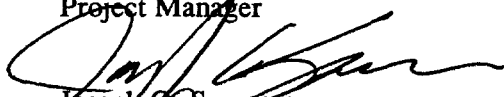
NJDEP as soon as possible. Hexcel requests a meeting with the NJDEP in October to present its remediation plan.

4. No response needed.
5. No response needed.
6. No response needed.
7. No response needed.
8. At this time, there have been no changes to the estimates of costs for remediation of the site. Costs will be reevaluated within the comprehensive plan.

Please call if you have any questions concerning this response letter.

Sincerely yours,  
HALEY & ALDRICH, INC.

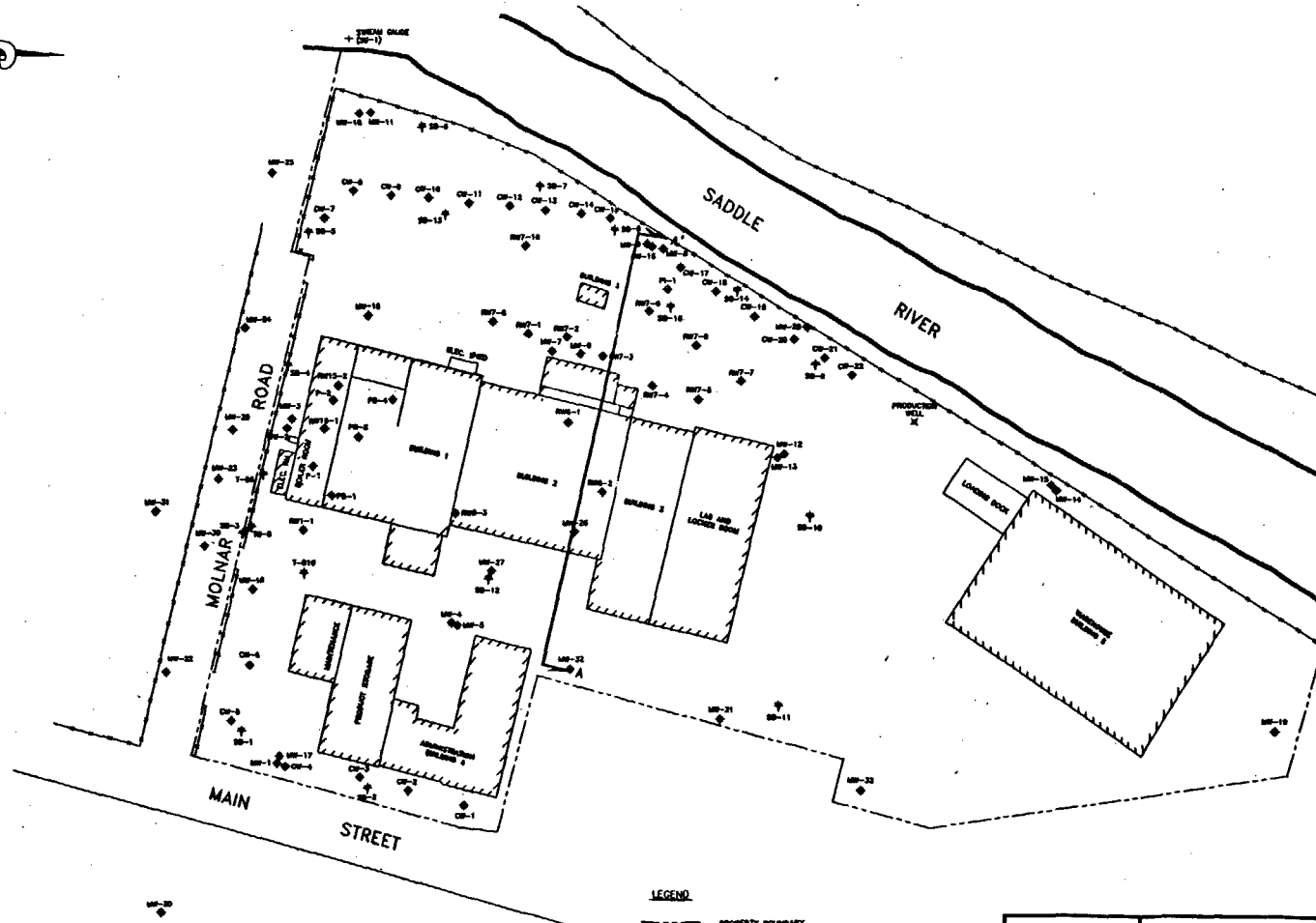
  
Marjorie A. Piette  
Project Manager

  
Joseph G. Savarese  
Project Manager

Enclosure

C: A. William Nosil  
Edward A. Hogan

MAPUGS\111\94039h30



15 0 15 30 45  
SCALE IN FEET

#### LEGEND

- PROPERTY BOUNDARY
- FENCE
- ◆ DEEP MONITOR WELL
- ◆ SHALLOW MONITOR WELL
- ◆ GROUND WATER RECOVERY WELL
- † SOIL BORING

NOTES:  
1. BASE PLAN PROVIDED BY KILIAN ASSOCIATES.



UNDERGROUND  
ENGINEERING &  
ENVIRONMENTAL  
SOLUTIONS

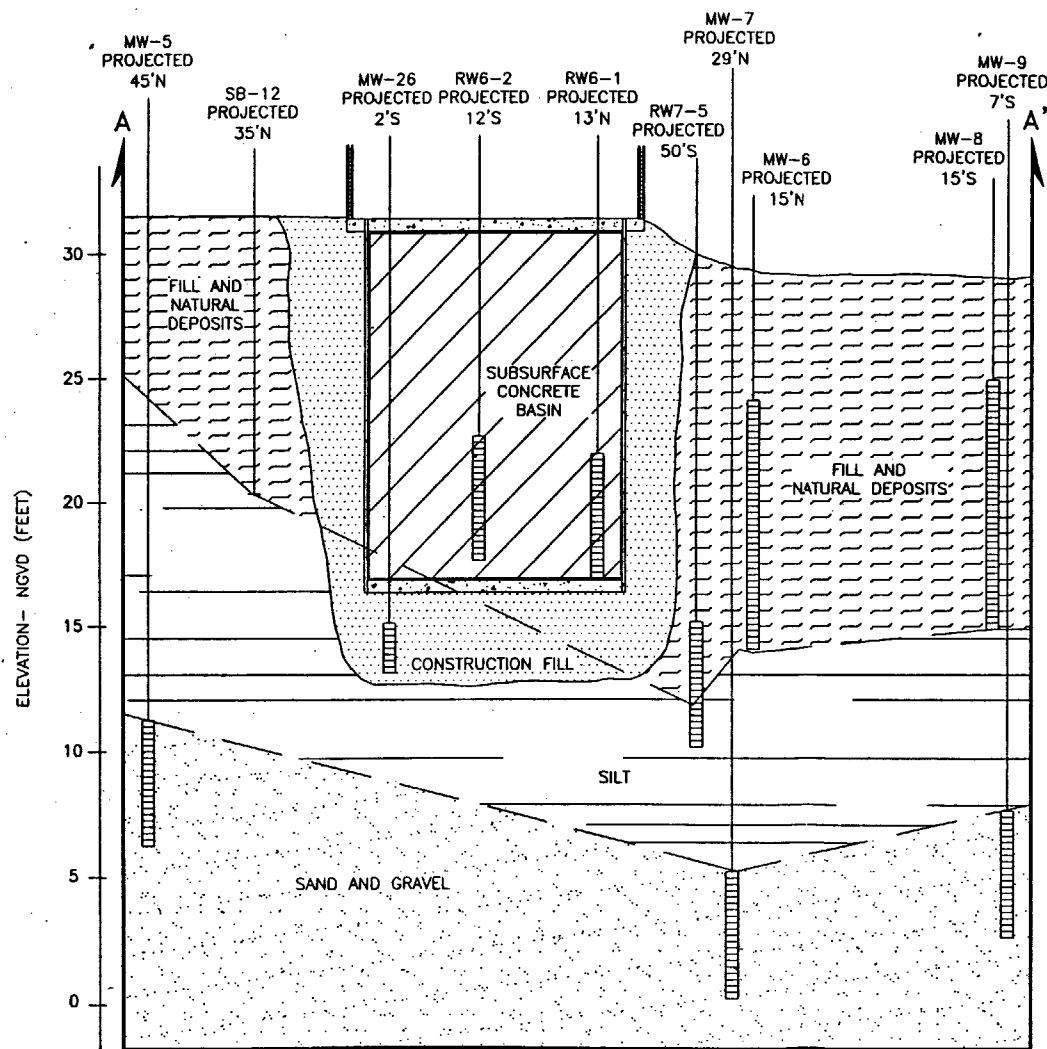
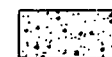
HEXCEL CORPORATION  
LODI, NEW JERSEY

### LOCATION OF CROSS SECTION A-A'

SCALE: AS SHOWN

JUNE 1998

FIGURE 1

**LEGEND**

CONCRETE



WELL SCREEN

**NOTES:**

- 1.) WELL SCREEN ELEVATIONS INFERRED FROM FIELD MEASUREMENTS AND WELL CONSTRUCTION DETAILS.
- 2.) SOIL ELEVATIONS INFERRED FROM BORING LOGS.
- 3.) SOIL INFORMATION FROM MW-27 (ADJACENT TO SB-12) WAS NOT UTILIZED SINCE THE BORING WAS NOT SAMPLED CONTINUOUSLY.
- 4.) BOTTOM OF CONCRETE BASIN INFERRED FROM BORING LOGS FOR MW-26 AND RW6-2.

0 15 30  
HORIZONTAL SCALE IN FEET



UNDERGROUND  
ENGINEERING &  
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SOLUTIONS

HEXCEL CORPORATION  
LODI, NEW JERSEY

## CROSS SECTION A-A', SILT UNDER BUILDING 2

SCALE: AS SHOWN

JUNE 1998

**FIGURE 2**

**TABLE I**

**ESTIMATED SCHEDULE OF REMAINING REMEDIAL ACTIVITIES**  
**HEXCEL FACILITY**  
**LODI, NEW JERSEY**

1998

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